PRICING OPTIONS ON JUMP-DIFFUSION MODEL

Yunfeng Yang and Hao Jin

Abstract

In this paper we study the patterns of behavior of the stock price and the results of Merton on European option pricing spread by stochastic analysis method. Assume that the stock price jump process is special class of compound Poisson process and the volatility without jump is the function of time. We derived the European option with continuous dividends pricing formula under the assumption of risk neutral and stock price jump process for the compound Poisson process, to promote the results of Merton.